

Appl. No. 09/778,922

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for separating particulate matter from a gaseous stream, the method comprising

- passing the gaseous stream containing the suspended particulates into a separator apparatus which includes at least two multiple-inlet-multicyclones and separating the particulates from the gas by centrifugal force,

wherein

- a separator apparatus is employed wherein at least two of the multiple-inlet cyclones, each equipped with a separation chamber, are adapted to operate in parallel so as to form a multiple-inlet-multicyclone apparatus, and wherein said multiple-inlet cyclones have straight guide vanes which are positioned outside of each of said separation chambers and serving serve to divide the gaseous stream into substreams so as to permit an accelerated gas flow velocity to be arranged individually for any one of said substreams.

2. (Previously Presented) The method according to claim 1, wherein the gaseous stream to be treated is flue gas discharged from a primary separator apparatus.

3. (Previously Presented) The method according to claim 2, wherein said primary separator apparatus comprises an axial cyclone or multiple-inlet cyclone or a cascaded cyclone configuration of the axial cyclone and multiple-inlet cyclone.

4. (Previously Presented) The method according to claim 1, wherein the gaseous stream to be treated is passed into said multiple-inlet-multicyclone apparatus from a secondary separator apparatus.

Appl. No. 09/778,922

5. (Previously Presented) The method according to claim 4, wherein said secondary separator apparatus comprises an axial cyclone or multiple-inlet cyclone, a cascaded cyclone configuration of an axial cyclone and multiple-inlet cyclone or a combination of a multiple-inlet cyclone with a cascaded cyclone configuration.
6. (Previously Presented) The method according to any one of claims 1-5, wherein the gaseous stream to be treated is product gas which is discharged from a fluidized catalytic process and contains suspended catalyst.
7. (Previously Presented) The method according to claim 1, wherein the gaseous stream to be treated is flue gas which is discharged from the combustion of coke performed in catalyst regeneration and hence contains suspended catalyst.
8. (Previously Presented) The method according to claim 6, wherein said fluidized catalytic process comprises catalytic cracking of hydrocarbon compounds performed in a fluidized catalytic cracking unit.
9. (Previously Presented) The method according to claim 1, wherein the stream to be treated is flue gas from a fluidized-bed combustion process of solid fuels performed in heat or power generation.
10. (Previously Presented) The method according to claim 1, wherein the dust concentration of the gaseous stream being treated is reduced to a value not greater than 50 mg/Nm³.
11. (Previously Presented) The method according to claim 1, wherein the separation of particulate matter is carried out using 3 to 25 parallel-connected cyclones.
12. (Previously Presented) The method according to claim 11, wherein 3 to 25 parallel-connected cyclones in an arrangement, wherein the diplegs of the parallel-connected cyclones are

Appl. No. 09/778,922

adapted into the interior of a common discharge conduit.

13. (Currently Amended) An assembly for separation of particulate matter from a gaseous stream in process equipment, the assembly comprising

- at least two multiple-inlet cyclones,

characterized by

- having at least two of the multiple-inlet cyclones connected in a parallel configuration, each equipped with a separation chamber, wherein said multiple-inlet cyclones have straight guide vanes on the outside of each of said separation chambers serving to divide the gaseous stream into substreams so as to permit an accelerated gas flow velocity to be arranged individually for any one of said substreams.

14. (Previously Presented) The assembly according to claim 13, wherein said parallel-connected cyclones have a common gas inlet channel formed between two concentric cylindrical or partially conical envelope surfaces, whereby said cyclones are adapted to operate in the interior space of said gas inlet channel.

15. (Currently Amended) The assembly according to claim 14, wherein said gas inlet channel (45) has an essentially circular cross section in a plane perpendicular to the center axis of the cyclone.

16. (Currently Amended) The assembly according to claim 13, wherein the center conduits (~~37A-37E~~) of said multiple-inlet cyclones (~~31A-31E~~) are adapted to pass through a common gas inlet channel (~~43~~).

Appl. No. 09/778,922

17. (Currently Amended) The assembly according to claim 13, ~~characterized in that~~wherein ~~each one of said multiple inlet cyclones (16A-16C; 31A-31E) is provided with a said separation chamber which is equipped with guide vanes (17A-17C; 42A-42E) and whose~~ has a center axis which is aligned essentially upright.

18. (Canceled)

19. (Previously Presented) The assembly according to claim 13, wherein the number of said parallel-connected multiple-inlet cyclones is 3 to 300.

20. (Previously Presented) The assembly according to claim 13, wherein said assembly is connected to a fluidized catalytic process apparatus or process equipment used in fluidized-bed combustion.

21. (Canceled)

22. (Canceled)